REMARKS

In response to the Official Action mailed November 25, 2008, Applicant respectfully requests reconsideration, reexamination and allowance of claims 1-3, 5, 8 and 12-25 in view of the amendments to the claims and the following remarks. Claims 1, 3, 8, 13-15 and 24 have been amended to replace the word "having" with "comprising" at the suggestion of the Examiner; Applicant is grateful for this helpful suggestion. Further, claims 13, 15, 19 and 24 have been amended to more clearly disclose the device of the present invention. Claim 25 has been added as a dependent claim, dependent on claim 1. Applicant respectfully suggest that as a result of these amendments and the arguments below, the pending claims now are allowable and an early notice of allowance is requested.

Applicant appreciates that the Office Action has dropped objections/rejections based on the Davison et al, Farin et al and Lafon et al references.

Rejections under 35 USC §102 against claims 15-24

The Office Action has rejected claims 15-24 under 35 USC § 102 (b) as being anticipated by Chopra et al (previously cited). Applicant has amended claims 15, 19 and 24 such that each now recites that the transducer is for emitting a coagulating ultrasound beam along a path towards a target to be coagulated and that the device is arranged without interface part in the path towards the target to be coagulated. This amendment is supported in the specification: see notably [0039] of the US publication mentioning the absence of separating membrane and more specifically [0042] reciting that the liquid extends continuously between the transducer and the tissue, thus implicitly disclosing the absence of any interface part.

Applicant emphatically notes that Chopra et al does not anticipate these claims because of the requirement of acoustic window 1 being both a membrane and an interface part of the probe arranged in the path of the ultrasound from transducer 3 to the tissue to be treated. In sharp contrast, as now amended the present claims precisely exclude both of these.

Consequently, these claims are novel for this reason and also inventive as already extensively explained in Applicant's previous replies, especially in Applicant's reply to the second OA (which also refers to Applicant's arguments in reply to the first OA with respect to the Lafon et al reference).

Please note also that Chopra et al in c.3, l.13-17 does not positively teach that there is no membrane or interface part in the US path from the transducer to the tissue. The recitation "comprised of" cannot be construed as meaning that the applicator does not comprise anything else than the transducer: it is always necessary for the transducer to be mounted on some support, be fed electrically somehow and so on (see c.3, l. 29-42)..

In other words, the recitation "comprised of" rather means here that this transducer with multiple acoustic matching layers is the essential feature of Chopra et al's disclosure, but the device necessarily involves - among other elements - some interface part between the transducer and the target, this interface part being the acoustic window (see c.3, l.42) made e.g. of a thin polymer film (see c.8, l.42-45 and c.9, l. 3-4).

As presently amended Applicant respectfully suggests that Chopra et al does not anticipate the claims of the present application.

Rejection under 35 USC §103 against claims 1-3, 5, 8, and 12 -14

The Office Action has rejected claims 1-3, 5, 8 and 12-14 under 35 USC § 103(a) as being unpatentable over Chopra et al. (previously cited) in view of Parins et al (US Patent No. 6,293,945).

Applicant notes that Chopra et al was previously discussed in its response to an office action mailed May 10, 2007 and also in its reply to the office action mailed October 5, 2007.

1) As a summary of the prior art, Chopra et al discloses an interstitial applicator using an ultrasound (US) transducer for coagulation. Applicant reiterates its position that Chopra does not disclose a laparoscopic probe and that this difference is significant in the field.

Parins et al discloses an electrosurgical device designed to:

- cut tissues with a cutting electrode 20 to which RF energy is applied: see c.2, l.39-49;

- electrically coagulate blood during surgery by means of the tip of metal tube 30: see c.2, l.51-60;

- provide suction (with help of vacuum) through lumen 33 at the end of metal tube 30 in order to remove debris cut away or smoke during coagulating through the RF energy: see c.2, l. 61-65 and c.3, l.15-17.

2) As a summary of the positions expressed in the Office Action, it is worth noting that the Office Action recognizes that Parins et al does not use ultrasound for coagulation and does not disclose suction for keeping the probe in place on an organ.

However, the Office Action expresses that (1) there is no structural difference when the purpose of vacuum is to remove debris or to keep the probe in place on an organ and that (2) the vacuum of Parins et al would also keep the probe in place during a laparoscopic procedure.

Thus, the Office Action concludes that when the combination of Chopra et al with Parins et al would result in a probe as claimed in claim 1 of the present application.

Applicant respectfully suggests that these opinions, noted in (1) and (2) above, are a matter of opinion and may not reflect the reality of how such a combination would work and how it is different from the teachings of the present invention.

3) First, regarding opinions (1) and (2), it is debatable that vacuum through tube 30 would keep the probe on an organ during a laparoscopic procedure.

Indeed, Applicant avers that during the cutting procedure, the need for the cutting electrode 20 to contact the tissues to be cut would tend to separate the end of tube 30 from the tissues, thus vacuum would not keep the probe in place on the organ.

4) Second and most importantly, the combination of the teachings of Chopra et al with Parins et al would not be considered a realistic approach, by a person having ordinary skill in the art, to solve the problems presented.

For example, Chopra et al does only provide for coagulation with help of ultrasound.

Coagulating tissues with ultrasounds does not result in debris at the time of coagulating (as is the case for cutting of Paris et al).

The coagulated parts are removed naturally by the animal body over a very long time after coagulation (more than a day is needed for this process).

Further, coagulating with ultrasounds will not result in smoke, as is the case of electric coagulation of Parins et al. This is because ultrasound does not heat superficially, but instead at the focus of ultrasound at a given depth in the tissue.

As a result, there is absolutely no reason, nor motivation to a person having ordinary skill in the art, to adapt the disclosed suction of Parins et al (which is only disclosed for removing debris and smoke) to the disclosed device of Chopra et al, for which there is no debris or smoke and thus no need to remove such debris or smoke. The addition of elements of one prior art patent to another, merely because it can be done, is not evidence of obviousness. The courts have held that:

> A statement that modifications of the prior art to meet the claimed invention would have been "'well within the ordinary skill of the art at the time the claimed invention was made' " because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab,* 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000)

Here, there is no reason (expressed in any of the references cited) why a person would combine such references. Applicant notes that the Parins et al disclosure does not hint that vacuum could be used as a means for keeping a probe on an organ (even if considered that this effect could result from a device made in accordance with the teachings of Parins et al). As such, Applicant respectfully suggests that claim 1 is not made obvious by Chopra et al in view of Parins et al.

5) If nevertheless a person having ordinary skill in the art would attempt the suggest combination, that is the teachings of Chopra et al with Parins et al, Applicant suggests that such a

persons would not know how to combine them to arrive at the present invention.. In Chopra et al, the coagulating element is an US transducer 3 in a tubular applicator housing 2 that is hermetically closed (see US window closed by film 3) in which flows the cooling/coupling liquid (see c.8, 63-67). As such, there is no possibility of providing suction through the applicator housing 2 of a device made in accordance with the teachings of Chopra et al nor through the tube 30 of the Parins et al disclosure.

Thus, the person having ordinary skill in the art would not know how to combine these two documents to arrive at the present invention. It is suggested that it is more likely that if a person having ordinary skill in the art would try to combine the teachings of Chopra et al with the teachings of Parins et al, so as to add both the cutting electrode 20 and suction tube 30 of Parins et al to the applicator of Chopra et al, he or she would not know how to combine them for the reasons as noted above or at least would not reach the invention disclosed in claim 1. As such, Applicant suggests that this is another reason why claim 1 is not made obvious by such a combination and is inventive over the cited references.

6) Further, should a person having ordinary skill in the art succeed in combining the teachings of Chopra et al with Parins et al, he or she would obtain a probe that would not fall within the scope of claim 1. Applicant suggests that, the person having ordinary skill in the art would at best place the applicator of Chopra et al (i.e. housing 2, membrane 1, transducer 3 and so on as they are mounted together) inside a larger tube, like tube 30 of Parins et al, so as to extend and retract the applicator of Chopra et al in this larger tube 30 (similar to cutting electrode 20 with respect to tube 30 in Parins et al), the larger tube 30 providing suction as in Parins et al.

Applicant suggests that it is unlikely that the diameter of the resulting probe would still be compatible with laparoscopic applications. Further, the suction provided by tube 30 would not keep the probe in place on the organ during coagulation operation (see claim 1) because coagulating with the resulting probe implies that tube 30 be retracted beyond transducer 3 in order to avoid that the emitted ultrasounds (radially with respect to tube 30) hit the internal surface of tube 30. In this position, tube 30 can clearly not keep the probe in place on the organ by suction (contrarily to the requirement of claim 1). As such Applicant suggests that this is another reason that the claim 1 is inventive over the Office Action's suggested combination of the cited references.

With respect to the rejection of claim 5, Applicant notes that in the disclosure of Parins et al it is the coagulating element (i.e. the end of tube 30) that surrounds the suction section while claim 5 claims exactly the contrary. As such, the combination of the teachings of Chopra et al with Parins et al could not result in the probe of claim 5.

There is absolutely no teaching or reason for a person having ordinary skill in the art to surround the US transducer disclosed in Chopra et al with a vacuum channel as claimed. Recall that suction tube 30 of the Parins et al disclosure surrounds the cutting electrode 20 (which does not exist in Chopra et al), not the coagulating element (i.e. the end of tube 30). It is suggested that the person having ordinary skill in the art would have no reason or motivation to do so as the coagulating transducer does not produce debris or smoke as already mentioned while this suction tube 30 of Parins et al is specifically disclosed for removing debris and smoke.

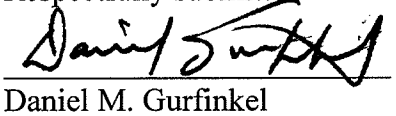
Further, the applicator housing 2 of Chopra et al is disclosed as being hermetically closed and thus the person of ordinary skill in the art would not even see how to place such a vacuum

channel around the transducer 3 of Chopra et al, which is inside the hermetically closed applicator housing 2. It is further suggested that a person having ordinary skill in the art would not remove the film or membrane 1 of the applicator housing 2 in order to arrange some suction channel in it as at the time of the invention there was a technical prejudice according to which such removal should be avoided due to the cooling/coupling liquid circulation (as already explained previously with respect to claims 15, 19 and 24).

In view of the foregoing remarks and amendments, it is believed that the subject application is now in condition for allowance, and an early Notice of Allowance is respectfully requested. Applicant encloses herewith a petition for a two month extension of time to respond to this Office Action as well as an authorization for the Commissioner to charge the fee for the petition to Applicant's attorney's deposit account (No. 23-0920). It is believed that no other fee is needed, however, should it be determined that any fees are necessary the Commissioner is hereby authorized to charge any additional fee which may be required for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Further, should any petition be required with respect to this reply and amendment, the Commissioner is respectfully requested to treat this paper as the necessary petition or petitions and to charge the petition fee(s) to the above noted deposit account.

April 24, 2009

Respectfully submitted



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